Middle School Earth and Space Sciences							
NGSS Code	**Performance Expectations**	**Bridge Builder Module**					
		Structural Concepts	**Beam Me Up**	**Bridge Analysis**	**Draft It Up!**	**Basic Box Bridge Structure**	**Improved Box Bridge Structure**
MS-ESS1	Earth's Place in the Universe						
MS-ESS1-1	Develop and use a model of the Earth-sun-moon system to describe the cyclic patterns of lunar phases, eclipses of the sun and moon, and seasons.						
MS-ESS1-2	Develop and use a model to describe the role of gravity in the motions within galaxies and the solar system.						
MS-ESS1-3	Analyze and interpret data to determine scale properties of objects in the solar system.						
MS-ESS1-4	Construct a scientific explanation based on evidence from rock strata for how the geologic time scale is used to organize Earth's 4.6-billion-year-old history.						
MS-ESS2	Earth's Systems						
MS-ESS2-1	Develop a model to describe the cycling of Earth's materials and the flow of energy that drives this process.						
MS-ESS2-2	Construct an explanation based on evidence for how geoscience processes have changed Earth's surface at varying time and spatial scales.						
MS-ESS2-3	Analyze and interpret data on the distribution of fossils and rocks, continental shapes, and seafloor structures to provide evidence of the past plate motions.						
MS-ESS2-4	Develop a model to describe the cycling of water through Earth's systems driven by energy from the sun and the force of gravity.						

MS-ESS2-5	Collect data to provide evidence for how the motions and complex interactions of air masses result in changes in weather conditions.						
MS-ESS2-6	Develop and use a model to describe how unequal heating and rotation of the Earth cause patterns of atmospheric and oceanic circulation that determine regional climates.						
MS-ESS3	Earth and Human Activity						
MS-ESS3-1	Construct a scientific explanation based on evidence for how the uneven distributions of Earth's mineral, energy, and groundwater resources are the result of past and current geoscience processes.						
MS-ESS3-2	Analyze and interpret data on natural hazards to forecast future catastrophic events and inform the development of technologies to mitigate their effects.						
MS-ESS3-3	Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.						
MS-ESS3-4	Construct an argument supported by evidence for how increases in human population and per-capita consumption of natural resources impact Earth's systems.						
MS-ESS3-5	Ask questions to clarify evidence of the factors that have caused the rise in global temperatures over the past century.						